

Applicant : Jeffrey H. Michaud, et al.
Serial No. : 09/058,496
Filed : April 10, 1998
Page : 2 of 12

Attorney's Ref No.: 07844-273001 / P247

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

receiving from a user an input selecting a layer in an electronic artwork having a plurality of layers, each layer including image data, the image data of the selected layer including opacity data;

11
~~in response to the input selecting a layer, using the opacity data of the selected layer to identify identifying one or more regions in the selected layer as non-transparent regions in a transparent frame;~~

calculating a perimeter boundary of the one or more non-transparent regions;

using the perimeter boundary to define defining an area in the selected layer based on a perimeter boundary of the one or more non-transparent regions in the selected layer;

assigning an action to the area, the action defining a function that is to be activated when the area is selected; and

associating the area and the action with the selected layer as a property of the selected layer in the electronic image.

2. (Original) The method of claim 1, wherein:

the action is a URL (Uniform Resource Locator).

3. (Currently Amended) The method of claim 1, wherein the plurality of layers include compositing controls and the method further comprising comprises:

compositing the plurality of layers of the artwork by combining the plurality of layers in accordance to produce a final image; and

converting the area and the action to a target output format.

Applicant : Jeffrey H. Michael, et al.
Serial No. : 09/058,496
Filed : April 10, 1998
Page : 3 of 12

Attorney's Ref No.: 07844-273001 / P247

4. (Currently Amended) The method of claim 3, wherein:
the target output format is HTML (HyperText Markup Language).
5. (Currently Amended) A computer program, tangibly stored on a computer-readable medium, comprising instructions for causing a computer to:
receive an electronic artwork having a plurality of layers, each layer including image data;
receive from a user an input selecting one of the plurality of layers, the image data of the selected layer including opacity data;
~~in response to the input selecting a layer, use the opacity data to identify one or more non-transparent regions in the image data; in the selected layer as non-transparent regions in a transparent frame;~~
calculate a perimeter boundary of the one or more non-transparent regions;
use the perimeter boundary to define an area in the selected layer based on a perimeter boundary of the one or more non-transparent regions in the selected layer; and
assign an action to the area, the action defining a function ~~that will~~ to be activated when the area is selected.
6. (Previously Presented) The computer program of claim 5, further comprising instructions to:
automatically fit a shape to the perimeter boundary, wherein the shape defines the area.
7. (Currently Amended) The computer program of claim 5, wherein the plurality of layers include compositing controls and the program further comprises instructions to:
~~composite the layers of the artwork by combining the plurality of layers to produce a final image;~~ and
convert the area and the action to a target output format.

Applicant : Jeffrey H. Michael, et al.
Serial No. : 09/058,496
Filed : April 10, 1998
Page : 4 of 12

Attorney's Ref No.: 07844-273001 / P247

8. (Original) The computer program of claim 7, wherein the target output format for the area and the action is HTML.

9. (Currently Amended) The computer program of claim 8, further comprising instructions to:
write out the ~~composited artwork~~ final image as an image file and write out an HTML file containing an image map for the area and a URL for the action, the HTML file referring to the image file.

10-11. Cancelled.

12. (Currently Amended) The method of claim 1, further comprising:
re-defining the area automatically if the content of the selected layer of the electronic artwork is edited, the re-defined area conforming to conform to a new perimeter boundary of the one or more non-transparent regions.

13. (Currently Amended) In a graphics application that supports dynamic content in layers, the method of claim 13, further comprising:

calculating any dynamic content for the selected layer when the layer is composited; and
using the calculated dynamic content to calculate the perimeter boundary and define
~~before the area is defined.~~

14. (Cancelled)

15. (Currently Amended) The method of claim 1, wherein:

the image data in the selected layer has two or more non-contiguous non-transparent regions ~~in a transparent frame; and~~

the two or more non-contiguous non-transparent regions in combination are used to

Applicant : Jeffrey H. Michael, et al.
Serial No. : 09/058,496
Filed : April 10, 1998
Page : 5 of 12

Attorney's Ref No.: 07844-273001 / P247

~~calculate the perimeter boundary, the area is defined based on a perimeter boundary of the non-transparent regions in combination.~~

16. (Previously Presented) The method of claim 15, further comprising:
generating multiple image maps from the non-transparent regions.

17-19. (Cancelled)

20. (Previously Presented) The computer program of claim 5, further comprising instructions for causing a computer to:

associate the area and the action with the selected layer as a property of the selected layer.

21. (Currently Amended) The computer program of claim 20, further comprising instructions for causing a computer to:

re-define the area automatically if the content of the selected layer of the electronic artwork is edited, the re-defined area conforming to conform to a new perimeter boundary of the one or more non-transparent regions.

22. (Currently Amended) The computer program of claim 5, further comprising instructions for causing a computer to:

calculate any dynamic content for the selected layer when the layer is composited; and
use the calculated dynamic content to calculate the boundary and define before the area is
defined.

23. (Cancelled)

24. (Currently Amended) The computer program of claim 5, wherein:

Applicant : Jeffrey H. Michaux, et al.
Serial No. : 09/058,496
Filed : April 10, 1998
Page : 6 of 12

Attorney's Packet No.: 07844-273001 / P247

the image data in the selected layer has two or more non-contiguous non-transparent regions ~~in a transparent frame~~; and

the two or more non-contiguous non-transparent regions in combination are used to calculate the perimeter boundary.

~~the area is defined based on a perimeter boundary of the non-transparent regions in combination.~~

25. (Previously Presented) The computer program of claim 24, further comprising instructions for causing a computer to:

generate multiple image maps from the non-transparent regions.

26-27. (Cancelled)

28. (Previously Presented) The method of claim 1, wherein:

defining the area further comprises automatically fitting a shape to the perimeter boundary, wherein the shape defines the area.

29. (Currently Amended) The method of claim 3, further comprising:

outputting the ~~composited artwork~~ final image as an image file; and

outputting an HTML file including an image map for the area and a URL for the action.

30. (Previously Presented) The computer program of claim 5, wherein the action is a URL (Uniform Resource Locator).

31. (Previously Presented) The method of claim 28, further comprising:

receiving user input selecting the shape.

32. (Previously Presented) The method of claim 28, wherein the shape is a circle.

Applicant : Jeffrey H. Michalek et al.
Serial No. : 09/058,496
Filed : April 10, 1998
Page : 7 of 12

Attorney's -cket No.: 07844-273001 / P247

33. (Previously Presented) The method of claim 28, wherein the shape is a rectangle.
34. (Previously Presented) The method of claim 28, wherein the shape is a polygon.
35. (Previously Presented) The method of claim 1, wherein the perimeter boundary is for the one or more non-transparent regions in combination.
36. (Currently Amended) The method of claim 1, wherein ~~the selected layer includes~~ there are one or more holes ~~formed between~~ within the one or more non-transparent regions; and wherein ~~the holes included within~~ are ignored in calculating the perimeter boundary ~~are included in the area.~~
37. (Currently Amended) The method of claim 1, wherein ~~the selected layer includes~~ there are one or more holes ~~formed between~~ within the one or more non-transparent regions; and wherein ~~defining an area is based on one or more separate perimeter boundaries for the one or more non-transparent regions, such that the holes are not included within the separate perimeter boundaries~~ each non-transparent region that has a hole is separated into separate non-transparent regions that do not contain holes; and the perimeter boundary is calculated from the separate hole-free non-transparent regions.
38. (Currently Amended) The computer program of claim 6, further comprising instructions to:
receive user input selecting ~~a~~ the shape.
39. (Previously Presented) The method of claim 38, wherein the shape is a circle.

Applicant : Jeffrey H. Michau, et al.
Serial No. : 09/058,496
Filed : April 10, 1998
Page : 8 of 12

Attorney's Ref No.: 07844-273001 / P247

40. (Previously Presented) The method of claim 38, wherein the shape is a rectangle.

41. (Previously Presented) The method of claim 38, wherein the shape is a polygon.

42. (Currently Amended) The computer program of claim 5, wherein the perimeter boundary is for the one or more non-transparent regions in combination.

43. (Currently Amended) The computer program of claim 5, wherein ~~the selected layer~~ includes there are one or more holes ~~formed between~~ within the one or more non-transparent regions; and

wherein ~~the holes included within~~ are ignored in calculating the perimeter boundary ~~are included in the area.~~

44. (Currently Amended) The computer program of claim 5, wherein ~~the selected layer~~ includes there are one or more holes ~~formed between~~ within the one or more non-transparent regions; and

~~wherein defining an area is based on one or more separate perimeter boundaries for the one or more non-transparent regions, such that the holes are not included within the separate perimeter boundaries~~

each non-transparent region that has a hole is separated into separate non-transparent regions that do not contain holes; and

the perimeter boundary is calculated from the separate hole-free non-transparent regions.

45-46. (Cancelled)
